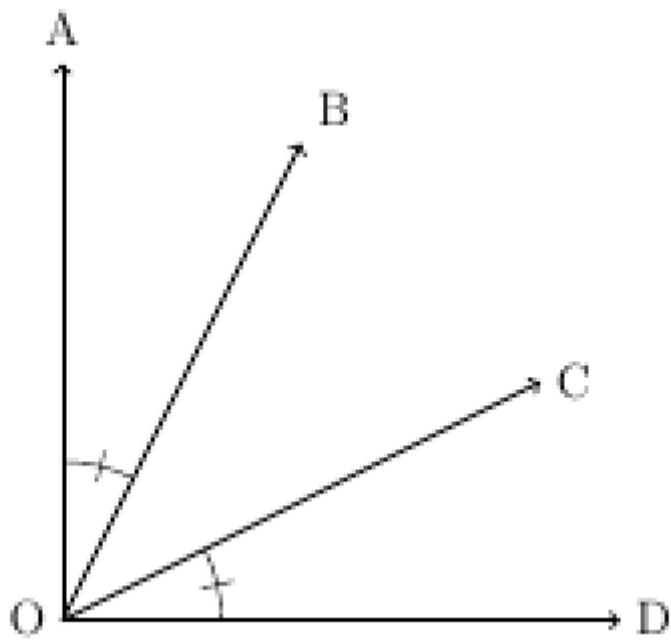


Topic: Measures of angles**Question:** Find the angle measure.

If $m\angle BOC = 37^\circ$ and $m\angle AOD = 90^\circ$, what is $m\angle AOC$?

**Answer choices:**

- A 15°
- B 26.5°
- C 53°
- D 63.5°



Solution: D

Let $m\angle AOB = x$.

Also, $m\angle COD = x$.

We can say

$$m\angle AOB + m\angle BOC + m\angle COD = m\angle AOD$$

Substituting gives

$$x + 37^\circ + x = 90^\circ$$

$$2x + 37^\circ = 90^\circ$$

$$2x = 53^\circ$$

$$x = 26.5^\circ$$

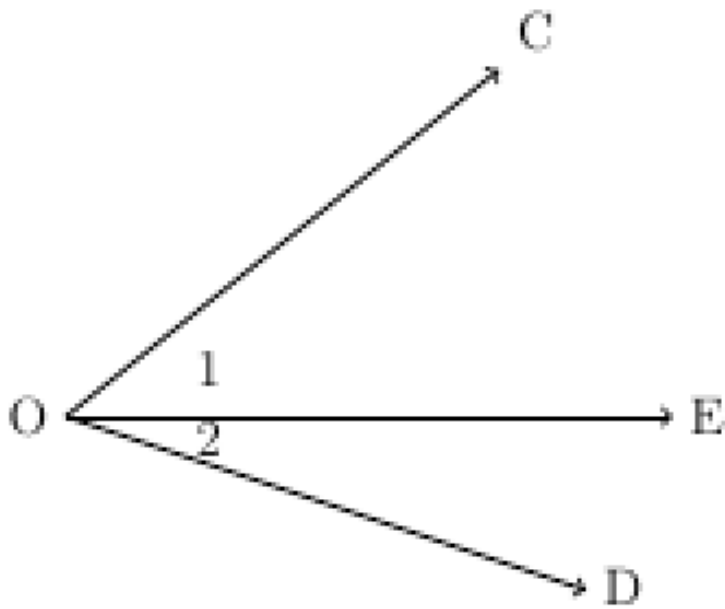
Add that to 37° to get $m\angle AOC$.

$$26.5^\circ + 37^\circ = 63.5^\circ$$



Topic: Measures of angles**Question:** Find the angle measure.

If $m\angle 1 = 4x^\circ$, $m\angle 2 = 2x^\circ$, and $m\angle COD = (5x + 9)^\circ$, what is $m\angle 1$ in degrees?

**Answer choices:**

- A 9°
- B 18°
- C 27°
- D 36°



Solution: D

We can say

$$m\angle 1 + m\angle 2 = m\angle COD$$

Substituting gives

$$4x + 2x = 5x + 9$$

$$6x = 5x + 9$$

$$x = 9^\circ$$

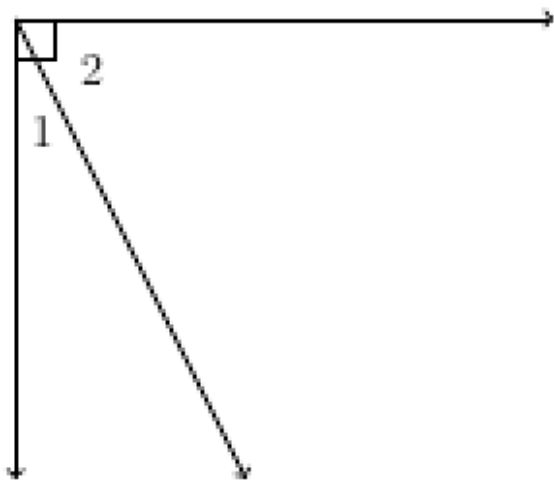
$$m\angle 1 = 4x = 4(9^\circ) = 36^\circ$$



Topic: Measures of angles

Question: Find the angle measure.

If $m\angle 1 = (x + 2)^\circ$ and $m\angle 2 = 3x^\circ$, what is $m\angle 2$ in degrees?



Answer choices:

A 22°

B 24°

C 66°

D 88°



Solution: C

We can say

$$m\angle 1 + m\angle 2 = 90^\circ$$

Substituting gives

$$x + 2 + 3x = 90^\circ$$

$$4x + 2 = 90^\circ$$

$$4x = 88^\circ$$

$$x = 22^\circ$$

$$m\angle 2 = 3x = 3(22) = 66^\circ$$

